DOCUMENT RESUME

ED 048 528 AC 008 731

AUTHOR	McClellan, William A.; And Others
TITLE	HumRRO Research on Officer Training.
INSTITUTION	Human Resources Research Organization, Alexandria, Va.
REPORT NO	HumRRO-PP-24-70
PUB DATE	Sep 70
NOTE	46p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Cultural Awareness, Instructional Materials, *Leadership Training, *Management Education, *Military Training, National Defense, *Officer Personnel, Research, Small Group Instruction, Systems Analysis, Systems Development
IDENTIFIERS	Human Resources Research Organization

ABSTRACT

This document records the four presentations on officer training and education research programs made by members of the Human Resources Research Organization (HumRRO) staff at a briefing sponsored by the Office of the Deputy Chief of Staff for Individual Training at Headquarters, U.S. Continental Army Command in July 1970. The presentations provide information about selected HumRRO research projects, summarizing the work, describing progress to date and giving a forecast of future demands to be placed on military leaders and advisors. Some of the components of the training were: leadership, manager and technical specialist training; work units concerned with systems engineering at the battalion level--developing methods for increasing the effectiveness of the battalion command group through analysis of the interactions commander and staff; work unit SKYGUARD to develop an improved defense officer advanced course; and the development of a technique for creating cultural self awareness. The briefing was the fourth in a series on HumRRO training research and development programs. (PT)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED048528

F - DoD
AC

Professional Paper 24-70
September 1970

HumRRO Research on Officer Training

Presentations at
Headquarters
U.S. Continental Army Command
Fort Monroe, Virginia July 1970

This document has been approved for public release and sale; its distribution is unlimited.

HumRRO

HUMAN RESOURCES RESEARCH ORGANIZATION

AD 710 121

1

The Human Resources Research Organization (HumRRO) is a nonprofit corporation established in 1969 to conduct research in the field of training and education. It is a continuation of The George Washington University Human Resources Research Office. HumRRO's general purpose is to improve human performance, particularly in organizational settings, through behavioral and social science research, development, and consultation. HumRRO's mission in work performed under contract with the Department of the Army is to conduct research in the fields of training, motivation, and leadership.

The contents of this paper are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

Published
September 1970

by
HUMAN RESOURCES RESEARCH ORGANIZATION
300 North Washington Street
Alexandria, Virginia 22314

ED048528

Prefatory Note

This paper records presentations made by members of the Human Resources Research Organization to the staff of Headquarters, U.S. Continental Army Command, Fort Monroe, Virginia, in July 1970. Current and past HumRRO research efforts on aspects of officer training and education were described.

These presentations were the fourth in a series of briefings on HumRRO education and training research and development programs of interest to CONARC. The briefings are sponsored by the Office of the Chief of Staff for Individual Training, CONARC, and are planned to inform CONARC of work being done in training and related human factors research and development. The Education and Training Research Division, CONARC, coordinated the briefing.

The introductory and background presentation was made by Dr. William A. McClelland, Executive Vice President of HumRRO. Dr. McClelland presented a conceptual framework for the topic and summarized five major HumRRO studies completed in recent years. Dr. T.O. Jacobs, Director, HumRRO Division No. 4, Fort Benning, Georgia, reported on progress of Work Units CAMBCOM, FORGE, OC LEADER, and INGROUP. A description of Work Unit SKY-GUARD was given in a presentation by Dr. Paul G. Whitmore, Jr., senior scientist at HumRRO Division No. 5, Fort Bliss, Texas. Dr. Alfred J. Kraemer, senior scientist at HumRRO Division No. 7 (Social Science), Alexandria, Virginia, discussed Work Unit COPE.

Presentations made in earlier briefings are recorded in HumRRO Professional Papers 1-69, *Use of Job and Task Analysis in Training*, January 1969; 25-69, Progress Report on HumRRO Research on Project 100,000, July 1969; and 21-70, *HumRRO Research in Training Technology*, July 1970.

CONTENTS

Page

HumRRO Research on Officer Training and Education: The Leader, The Manager, The Technical Specialist
William A. McClelland 1

Overview and Summary of Work Units OC LEADER, CAMBCOM, FORGE, and INGROUP
T.O. Jacobs 11

Work Unit SKYGUARD: Air Defense Officer Course
Paul G. Whitmore and Harry L. Ammerman. 23

Development of a Technique for Creating "Cultural Self-Awareness"
Alfred J. Kraemer 37

HumRRO RESEARCH ON OFFICER TRAINING AND EDUCATION: THE LEADER, THE MANAGER, THE TECHNICAL SPECIALIST[1]

William A. McClelland

INTRODUCTION

The purpose of this briefing on HumRRO officer training research is to provide information about selected research projects of interest to the Command that bear on CONARC's Training Research and Development Program. Recent HumRRO staff presentations to the Headquarters in this briefing series were given in September 1968, February 1969, and February 1970.[2]

The four speakers at this briefing in order of appearance will be:

- Myself, Bill McClelland. I will present a conceptual framework for the topic and summarize five major studies completed in recent years—OFFTRAIN, SAMOFF, LEAD, HIGHLEAD, and TRAINMAN.
- Dr. T. Owen Jacobs, Director, HumRRO Division No. 4, Fort Benning, will report on progress to date and forecast on Work Units CAMBCOM, FORGE, OC LEADER, and INGROUP.
- Dr. Paul G. Whitmore, senior scientist, HumRRO Division No. 5, Fort Bliss, will describe Work Unit SKYGUARD (ER-77).
- Dr. Alfred J. Kraemer, senior scientist, HumRRO Division No. 7 (Social Science), Alexandria, will discuss progress to date and forecast on Work Unit COPE.

All of the work units mentioned cover one or more aspects of R&D on officer training and education.

Requirements for Effective Organizational Leadership

It appears almost inevitable that in the future greater demands will be placed on military leaders. What evidence exists for this statement? Today's demands are certainly great. Trends that support the contention are as follows:

- The complexity of doctrine, organization, and equipment continues to increase.
- The range of abilities among subordinates continues to increase also. Consider, for example, some of the implications of increasing the size of the Army's volunteer component.
- The variety of officer roles seems to be increasing. Witness the new, high-level emphasis on the military advisor, expanding career fields in operations research and systems

[1]This paper is an expanded version of the original paper.
[2]See listing in Prefatory Note.

analysis, and increased emphasis on the Army's role, both in civil disorders and in social betterment programs.

- The need to perform both old and new missions with a smaller force demands greater efficiency.

The requirements for leadership are based on the kinds of performance demanded of organizations. Olmstead (1), a senior HumRRO researcher, has said:

> It appears that future organizations, encountering greater requirements for flexible response, will depend more upon fast acquisition, processing, and use of intelligence; speedy and accurate communication; flexible decision making; and swift reaction to external pressures. In general, although continuing to rely upon doctrine, policies, and procedures to guide decisions and actions, organizations must also possess capabilities to search out, accurately identify, and correctly interpret the properties of operational situations; to solve problems relevant to these situations; and to react appropriately to rapidly changing situational demands.

If this deduction is correct, then the role of the military organization becomes that of a problem-solving, decision-making, and action-taking system. Bennis (2) believes that to be effective in this role an organization must:

(1) Have the capacity to evaluate reality, that is, obtain accurate information about both external and internal conditions, correctly interpret the information and understand its relevance to operations.
(2) Have the capacity to learn or to analyze information on its performance and to change activities in terms of what was learned.
(3) Establish open and efficient communication, both internally and externally.
(4) Possess adaptability to solve problems, react flexibly to changing demands and unanticipated events.

Olmstead (1) also states:

> Organizational capabilities such as those described have their bases in certain processes by which the organization identifies, solves, and adapts to changing problems that arise in the environments. The capacity of an organization to identify, solve, and adapt to operational problems derives in part from the formal body of doctrine, policies, and procedures intended to guide decisions concerning which functions should be performed, in part from the adequacy of techniques and equipment that dictate how the functions should be performed, and in part from the skills of individuals to perform them. However, neither the logic of decisions, the adequacy of techniques and equipment, nor the competence of individuals in executing technical operations are, in themselves, sufficient to result in a responsive and adaptive system of decision and action. A remaining essential element is the dynamic processes concerned

with the integration of information and decisions and the coordination of activities.

What does this conceptualization of the requirements of organizational leadership mean to this Headquarters? CONARC's crucial role is the preparation of officers to perform more effectively in organizations. Further, CONARC training should prepare officers to find ways to develop responsive organizations and to maintain them in a state of dynamic effectiveness. It is part of HumRRO's mission to assist the Army's trainers and educators in the performance of this role through behavioral science R&D on officer training and education. We perform our mission, for example, by developing and testing better ways of forecasting and analyzing both organizations and officers' jobs in them, developing improved training methods and media, and evaluating the outcomes of training.

BEHAVIORAL AND SOCIAL SCIENCE RESEARCH AND DEVELOPMENT IN SUPPORT OF OFFICER TRAINING AND EDUCATION

The major part of this presentation is devoted to five illustrative, completed research and development efforts, with the code names OFFTRAIN, SAMOFF, LEAD, HIGHLEAD, and TRAINMAN. Excluded from consideration are nine other relevant work units: DECISION, UNIT, RECON, ROCOM, SPANOCON, CIVIC, MAP, OCS, and AREA.

In the title of this presentation are contained the terms leader, manager, and technical specialist. The concepts from which these officer roles stem are defined as follows:

> Leadership: The process of influencing the actions of individuals and organizations in order to obtain desired results (3).
> Management: The most cost beneficial allocation of resources to accomplish assigned missions.
> Technical Specialty: Detailed knowledges and skills required to perform officer tasks associated with managing and directing men and equipment.

HumRRO leadership research has been and is being conducted at different levels of command and experience, although these efforts are not necessarily restricted to only one level:

> Pre-commissioning (OFFTRAIN, OC LEADER).
> Company level (OFFTRAIN, LEAD, COPE).
> Field grade (CAMBCOM, FORGE, SKYGUARD).
> Higher levels of command (HIGHLEAD).

HumRRO research on management and the technical specialist is largely focused on mid-level officers in Armor, Air Defense, and Infantry (TRAINMAN, SAMOFF). Of course, as with almost all systems of categorization, no work unit fits neatly into only one pigeonhole.

A word about dissemination of findings—how has completed research been communicated?

> Briefings, such as this, to include both progress and final reports.

Publications, such as HumRRO Technical Reports, Professional Papers, Research By-Products, and articles in service magazines and papers.
TAS, technical advisory service to translate findings into operational use through consultation and advising.

Work Unit OFFTRAIN, Studies in Leadership and Leadership Training

In Work Unit OFFTRAIN, the objective was to improve leadership training by the development of training procedures and materials based on the study of the leadership process in platoon-sized units.

OFFTRAIN research began in the 1950s with the development of a leadership course for junior officers using sound films to depict characteristic leadership problems. The problems were based on descriptions of leadership situations collected from Army officers and NCOs in combat and noncombat areas. Each film terminated at the point where the leader was faced with making decisions and taking action. A small group discussion followed. A manual for instructors was also prepared.

The OFFTRAIN leadership course was evaluated by comparing graduates with other officer-students who had received regular training. The OFFTRAIN students showed great improvement in the quality of their solutions to leadership problems and were better able to evaluate leadership in others (4, 5).

From the OFFTRAIN materials, 25 U.S. Army Training Films were prepared, made available in 1958, and received extensive use. During a trip to Vietnam in June 1970, Dr. Crawford, President of HumRRO, observed one in use at a Vietnamese Army School with a Vietnamese sound track.

The second major OFFTRAIN effort involved a detailed study of the actual behavior of the junior officer leader as he interacts with his subordinates in goal- or mission-oriented situations. The purpose of the study was to obtain information about the on-the-job leadership behaviors that distinguish between effective and ineffective infantry platoon leaders (6, 7). Sources of the data included:

(1) Interviews with 281 platoon members to provide detailed descriptions of leader behaviors in specific situations.
(2) A questionnaire in which platoon members rated platoons and platoon leaders.
(3) Ratings of platoon leaders by company commanders.
(4) Tests of intelligence and military information administered to platoon leaders.

Considerable agreement exists between subordinate and superior ratings.

The effective leader emphasizes performance as the basis of reward and punishment, uses punishment instructively and for motivational failures, and communicates clearly about the standards desired, providing precise information about needed improvement when reacting to below-standard performance.

This behavioral analysis of effective and ineffective leader actions and the model of the leadership process which resulted were critical to

the final phase of OFFTRAIN research, the development of a leadership instruction program for junior officers (7, 8). A 16-hour course was developed using tape-recorded skits, group discussion, and student and instructor manuals. The course emphasizes study of the leader's interactions with his men in the accomplishment of assigned tasks, and the effect of his actions both on the motivation and morale of his men and on the unit's ability to perform assigned tasks. Student reactions to the course immediately after its completion were good. Follow-up data from the final evaluation group indicate that these favorable reactions do not diminish significantly over a period of four months.

This course was adopted for use in the ROTC program in 1962. Although we have conducted no follow-up studies, informal feedback indicated that it has functioned quite well.

OFFTRAIN materials have also been used at the U.S. Army Primary Helicopter School to train Warrant Officer Candidates; by the U.S. Army Security Agency Training Center and School in its Office Career Course; the Army Quartermaster School in its OCS; and the U.S. Army School of the Americas. The Armor School has used these materials in its OCS. A special adaptation is being used in the WAC School at Fort McClellan, Alabama (9, 10).

Can OFFTRAIN results be extended further? Quite possibly. The approach is rather general and should have applications to other junior officer leadership instruction. Some content for other courses, say in Armor or Artillery areas, might have to be specially developed.

Work Unit SAMOFF, Systematic Analysis of Training Requirements and Procedures for Surface to Air Missile Battery Officers

In Work Unit SAMOFF, HumRRO undertook the development of well-defined training requirements for SAM battery officers and improvement of the effectiveness of the methods and techniques used in school and on-the-job training. The various stages of this programmatic research effort should sound very familiar to students of CONARC Reg 350-100-1 (11), namely job description, training objectives, training course development, and evaluation.

First, the Air Defense battery officer's job. What is it? What must he do? In an effort to conceptualize the officer's job, Ammerman (12) developed a model, or outline, of officer behavior. The model was developed from considerations of existing job descriptions, the nature of job information typically provided by interviews with officers and an information processing view of purposive behavior. Eight-hundred and sixteen tasks emerged covering troop leadership and unit management, as well as tactical and technical functions. General statements of work were effectively broken down into task-level statements of job activities. The technique should provide a practical means for describing most supervisory and command jobs characterized by a high proportion of variable, non-routine and covert (i.e. not easily observable) activities.

Ammerman (13) also developed and tried out procedures for converting task inventory information into training objectives, using the Nike Fire Control Platoon Leader job. These procedures and the definite decision

rules he developed should provide a method for deriving behavioral statements of relevant and essential training objectives for junior officer jobs.

In another SAMOFF research study (14) standardized performance and written testing materials and procedures were developed to assess the proficiency of Nike platoon leaders. The test was judged to be suitable for administration by Army personnel to identify areas in job performance that require more training.

The last phase of SAMOFF involved the development and test of technical training materials for Nike junior officers. Haverland (15) identified the checks and adjustments necessary to determine whether the major functions of the Nike-Hercules fire control system could be satisfactorily accomplished. Then programed instruction materials were prepared to teach junior officers this relevant technical information. Evaluation of these 10 programed manuals indicated that they (a) taught a substantial amount of technical information beyond that taught in the Basic Course, (b) were most effective for the more complex maintenance checks and procedures, and (c) did not need to be prepared for teaching operational procedures—existing Army publications supplemented by a special index were adequate.

These programed instruction booklets were subsequently reproduced and distributed throughout the U.S. Army Air Defense Command, and the SAMOFF approach to developing task inventories and training objectives has been drawn upon by the U.S. Army's Signal, Missile and Munitions, Armor, Adjutant General, Chemical, and Quartermaster Schools (9) as well as being cited as a fundamental reference in CONARC Regulation 350-100-1 (11).

Can any further mileage be obtained from the SAMOFF research? Specific applications seem unlikely, if only because SAMOFF materials relate to Nike officer jobs. But, both the methods developed for analyzing jobs and the lessons learned about the procedures required and values of programed instruction are of general value in officer training. Haverland (16) also feels the SAMOFF and OFFTRAIN research efforts are of value in defining and structuring a variety of executive type positions, the kinds of assignments most field grade officers receive at some time in their careers.

Work Unit LEAD, Development of Training for Improving the Combat Skills of Leaders in Small Infantry Units

While OFFTRAIN research primarily focused on the junior officer's performance of garrison and training duties, the purpose of Work Unit LEAD (17) was to identify and record the critical combat performances, knowledges, and skills required of the infantry rifle platoon leader that lead to effective individual and unit performance in combat and to develop sample or prototype training materials.

By agreement with CONARC and the U.S. Army Infantry School (USAIS), the first three steps in a seven-step, training program development cycle were completed:

(1) Analysis of the military system in which the job occurs.

(2) Analysis of the particular job or jobs.
(3) Specification of the requirements by identification of performance, knowledges, and skills.

The last four steps were left to the USAIS:

(4) Determination of training objectives.
(5) Construction of the training program.
(6) Development of job proficiency measurements.
(7) Evaluation of the program.

More than 200 detailed descriptions were obtained for small-unit combat actions in World War II, the Korean conflict, the Philippine Huk campaign, the British experience in Malaya, the Cuban revolution, and the Vietnam conflict. In addition, use was made of tape-recorded conversations collected in Vietnam by a Division No. 4 research team which interviewed more than 400 infantry small-unit leaders on their recent combat experiences.

As a result of this study, approximately 6,500 performances, knowledges, and skills stemming directly from combat requirements were identified, recorded, and categorized into 42 major subject areas.

These subject areas included such topics as offensive, defensive, and airmobile operations; mounted and dismounted platoon combat formations; wire, radio, and messenger communications; land navigation; and specific items of equipment and weaponry. Combat-experienced officers from the Infantry School reviewed and approved the categories, and made contributions to the separate research papers on critical requirements.

The data collected in Work Unit LEAD have already begun to be doubly useful. In addition to information concerning the job of the officer who commands the rifle platoon, these data provide information on the critical combat performances, knowledges, and skills required of the platoon's noncommissioned officers--squad leaders and fire team leaders. HumRRO researchers also identified and recorded these NCO requirements, and have provided them to the Infantry School in a separate set of research papers.

An Army spokesman has said:

> The results of Work Unit LEAD research have been characterized as being the most detailed and comprehensive specification ever recorded of the combat performances required of the infantry rifle-platoon leader.[3]

Another LEAD product (18) was a programed text on fundamentals of defensive tactics, developed in a study to test better ways to construct and use programed instruction materials to facilitate acquisition and retention of information.

Work Unit HIGHLEAD, Training for Leadership at Senior Levels of Command

The fourth work unit, HIGHLEAD, was undertaken to provide a scientific basis for leadership training at senior levels and for the development of a conceptual framework that can serve as the basis for a doctrine of

[3]*Army Times*, March 18, 1970.

leadership at senior levels. The product, intended for use particularly at the Command and General Staff College (USC&GS), is now a DA Pamphlet (19).

There were two phases to the approach followed in this effort (3). The first phase was role analysis. What is the senior commander's leadership role? It was viewed as containing two aspects: (a) integrating, directing, and leading a multi-unit, hierarchical organization as a unit, and (b) leading and directing his subordinate commanders and his staff. The second phase to the approach was identification of the scientific concepts and findings relevant to high-level leadership from the psychological, sociological, and business management literature.

The product was a 17-chapter book, published as DA Pamphlet 600-15, October 1968 which is in use at USC&GS and other senior and junior service schools and colleges. The contents consist of three parts:

Part I--The commander as leader: analysis of the process of leading and the influence process; the role of the senior commander; the role of authority and communication in leadership.

Part II--Variables involved in leading the organization as a whole: the dynamics of organization; the development of unity, cohesion, motivation, and morale; the analysis of factors which serve to regulate and codify behavior, such as rules, procedures, discipline, and social norms.

Part III--Working relationships between the commander and his high-level subordinates; directing the staff; the staff as a problem-solving group; relations between staff and line officers; performance goals and standards, and promoting cooperation and teamwork.

The HIGHLEAD effort has received very favorable comments from the Command and General Staff College and from the Infantry and WAC Schools (10).

Work Unit TRAINMAN, Teaching Training Technology and Training Management

The objective of Work Unit TRAINMAN was to organize the facts and facets of the technology of training and the systems development of training into a course of instruction beneficial to Army officers in their roles as training managers.

Is there a need for such a course? The Armor School, which asked that it be developed as part of the Electives Program in the Advanced Course, felt there was—perhaps because of the crucial importance of training and the frequency with which officers receive training assignments. Further, there *are* new techniques in training and there *is* need for more efficient management of training.

Is such a course feasible? Is enough known about the technology and management of training? Can technology be effectively communicated (in

this instance, by HumRRO)? These were the questions for test. The approach adopted can be summarized as follows:

(1) Survey the job requirements of training relevant duty assignments of Armor Officer Advanced Course Graduates.
(2) Develop the preliminary course using the HumRRO training systems approach and HumRRO expertise.
(3) Administer-Evaluate-Revise. Re-administer the course, first with the HumRRO staff as instructors, later with an Army instructor.

A 96-hour course in the management of training was developed and evaluated through successive presentations to Armor Advanced Officer classes. Critiques by military students and staff indicated the course had considerable value but required some additional revision before adoption by the Army. The course should be reduced in length. A 30-hour course can be constructed without losing the values of the long version. Also, the course should be integrated with CONARC Regulation 350-100-1 (11). However, we feel the course contains the managerial functions and technological procedures for which the CONARC regulation has provided administrative techniques. These and other suggested revisions are believed to be within CONARC's capabilities to implement.

The TRAINMAN Technical Report has recently been published (20). We believe a progressive series of training technology and training management courses should be a part of both junior and senior officer training if we are to have a more efficient Army training system.

CONCLUSION

The five work units in officer training and education which I have outlined from past HumRRO work programs (OFFTRAIN, SAMOFF, LEAD, HIGH-LEAD and TRAINMAN) have covered junior and senior officers, garrison and combat situations, and leadership and management functions. They have contributed to methodology and to the development of usable training materials. They have also influenced CONARC policies, procedures, and programs of instruction.

Literature Cited

1. Olmstead, Joseph A. *Requirements for Organizational Leadership*, HumRRO Professional Paper 26-69, August 1969.
2. Bennis, Warren G. *Changing Organization: Essays on the Development and Evaluation of Human Organization*, McGraw-Hill Book Company, New York, 1966.
3. Olmstead, Joseph A. *Leadership at Senior Levels of Command*, HumRRO Professional Paper 5-68, February 1968.
4. Lange, Carl J., Rittenhouse, Carl H., and Atkinson, Richard C. *Training Leaders With Sound Films and Group Discussion Techniques*, HumRRO Professional Paper 3-69, February 1969.

5. Lange, Carl J., Rittenhouse, Carl H., and Atkinson, Richard C. *Films and Group Discussions as a Means of Training Leaders*, HumRRO Technical Report 27, March 1956.

6. Lange, Carl J., Campbell, Vincent, Katter, Robert V., and Shanley, Fred J. *A Study of Leadership in Army Infantry Platoons*, HumRRO Research Report 1, November 1958.

7. Jacobs, T.O. *Leadership in Small Military Units*, HumRRO Professional Paper 42-68, December 1968.

8. Jacobs, T.O. *A Program of Leadership Instruction for Junior Officers*, HumRRO Technical Report 84, June 1963.

9. U.S. Continental Army Command. *Research and Development: Utilization of Behavioral and Social Science Research (FY 1966)*, CONARC Pamphlet 70-1, February 1968.

10. U.S. Continental Army Command. *Research and Development: Utilization of Behavioral and Social Science Research (FY 1967)*, CONARC Pamphlet 70-1, April 1968.

11. U.S. Continental Army Command. *Systems of Engineering of Training*, CONARC Regulation 350-100-1, February 1968.

12. Ammerman, Harry L. *A Model of Junior Officer Jobs for Use in Developing Task Inventories*, HumRRO Technical Report 65-10, November 1965.

13. Ammerman, Harry L. *Development of Procedures for Deriving Training Objectives for Junior Officer Jobs*, HumRRO Technical Report 66-3, May 1966.

14. Morse, John L., Brown, William F., Smith, Robert G. Jr., and Fightmaster, Walter J. *Measurement of the Job Proficiency of Nike Ajax Platoon Leaders*, HumRRO Technical Report 66, October 1960.

15. Haverland, Edgar M. *Development of Technical Training Materials for Nike Hercules Junior Officers*, HumRRO Technical Report 66-6, June 1966.

16. Haverland, Edgar M. *Officer Training Research and Its Implications for Executive Training*, HumRRO Professional Paper 19-69, May 1969.

17. Brown, Frank L., and Jacobs, T.O. *Developing the Critical Combat Performance Required of the Infantry Rifle Platoon Leader*, HumRRO Technical Report 70-5, April 1970.

18. McCrystal, Thomas J., and Jacobs, T.O. *The Effect of Programed Instruction Response Conditions on Acquisition and Retention*, HumRRO Technical Report 66-20, December 1966.

19. Department of Army. *Leadership at Senior Levels of Command*, DA Pamphlet 600-15, Washington, October 1968.

20. Haggard, Donald F., Willard, Norman Jr., Baker, Robert A., Osborn, William C., and Schwartz, Shepard G. *An Experimental Program of Instruction on the Management of Training*, HumRRO Technical Report 70-9, June 1970.

OVERVIEW AND SUMMARY OF WORK UNITS OC LEADER, CAMBCOM, FORGE, AND INGROUP

T.O. Jacobs

INTRODUCTION

This presentation is an overview and summary description of Work Units OC LEADER, CAMBCOM, FORGE, and INGROUP from HumRRO Division No. 4 at Fort Benning, Georgia, where a major part of our work program efforts support central interests of the U.S. Army Infantry School (USAIS), men and their leadership, and organizational effectiveness.

The first of the Work Units, OC LEADER, is a systems engineering of leadership instruction for Officer Candidates at the platoon level. CAMBCOM and FORGE, respectively, are concerned with systems engineering at battalion level, identifying knowledges, skills, and performances of battalion commanders and principal staff, and developing methods for increasing the effectiveness of the battalion command group through analysis of the interactions between commander and staff that lead to effectiveness. Thus, our interests in these three areas span the range of instructional responsibilities of the Infantry School.

The fourth effort selected for discussion, Work Unit INGROUP, is concerned with instructional techniques that are particularly adapted to the teaching of such subjects as leadership, and of dealing with matters related to organizational effectiveness.

The primary purpose of OC LEADER is systems engineering of leadership instruction in Officer Candidate School (OCS). There are several reasons for HumRRO involvement in the systems engineering of leadership. The first is to provide a basis for the development of leadership training that is "job realistic." This, of course, is an objective of any systems engineering effort. A second important reason in this case, is to bring The Candidate Brigade (TCB) and the academic departments responsible for leadership instruction in OCS closer together in terms of making *what is taught as principle* that which is practiced as fact in the development of leadership among officer candidates. A third reason, and perhaps the most important, is to provide an example, and perhaps to help develop a methodology for systems engineering in the "soft" area of leader subjects, of which leadership training is one.

As you are well aware, there has been substantial difficulty in the school system in the systems engineering of skill areas that do not directly involve equipment. To some extent, the methodology prescribed in CONARC Reg 350-100-1[1] has proven difficult to apply to such skill

---

[1]U.S. Continental Army Command. *Systems Engineering of Training (Course Design)*, CONARC Reg 350-100-1, February 1968.

areas. It is hoped OC LEADER will contribute to the development of methodology and help solve this problem.

SEVEN STEPS OF SYSTEMS ENGINEERING

Following are the seven steps of systems engineering, as prescribed in the CONARC Regulation and the associated USAIS implementing directives:

(1) Job Analysis
(2) Training Tasks
(3) Training Analysis
(4) Training Materials
(5) Testing Materials
(6) Conduct of Training
(7) Quality Control

The space between the first three and the last four steps indicates where the division of responsibility between HumRRO Division No. 4 and USAIS has been drawn. It is considered appropriate and desirable for HumRRO to have primary responsibility for the first three steps—in essence, information development steps. The following four steps involve the making of decisions, which is thought to be more appropriately within the province of the Infantry School. Thus, we will furnish information to the School, which the School and the Leadership Department can then use in making decisions concerning the actual content of training.

SYSTEM ENGINEERING, JOB ANALYSIS

The first step in systems engineering, job analysis, contains two separate elements, job identification and the development of task inventories. By job identification, we mean simply the identification of initial duty assignments to which graduates of OCS go, and thus for which they should be trained.

Because of time constraints in the present effort, we were unable to do a thorough identification of jobs, which would have involved following graduates to their initial duty assignments. Instead, we used a shortcut procedure in which 385 Infantry officers attending the Advanced Course at USAIS were selected on the basis of having been graduated initially from OCS, and were surveyed by means of a records search to identify the initial duty position they had received following graduation from OCS. In addition, we sought to learn their subsequent duty assignments during the remainder of their first two years of active duty service. (The reason for the latter effort was that we thought it might be important to train not only for initial duty assignments but for subsequent assignments. In addition, we thought it might be possible that subsequent duty assignments are determined to some extent by initial duty assignments. We found this seems to be the case.)

Among the 385 Infantry officers, we found 66 initial duty positions and 47 different MOS numbers. We recognize that the findings from this particular sample must be interpreted with caution, because there is no guarantee that it is representative. The duty positions that were identified, and the MOS numbers that had been awarded, were compared with the findings of an earlier HumRRO study (ROCOM) which had been done on a much

more comprehensive basis. The two separate distributions of duty positions and MOS numbers were found to be roughly similar. This provides some assurance that the present procedure is sufficiently accurate.

The following five distinct tour patterns were identified:

	Category	Percent
1.	Troop Command	28.8
2.	Troop Staff	20.8
3.	Instructor	7.0
4.	Special Forces	7.5
5.	Aviator	18.9
	Mixed	11.4
	Unclassifiable	5.6

A tour pattern is defined by the relative amount of time during his first two years that an officer spent in a duty position that could be classified into one of these five categories. Some tour patterns were mixed, so that we could not say that one was more pronounced than another. Approximately 10% of our sample fell into that category, while a remaining approximate 5% could not be classified. Examples of these unclassified MOSs were 0001—duties unassigned; 0003—patient; 5505—Information Officer.

Relying on previous research at HumRRO Division No. 4 under Work Unit OFFTRAIN, a task inventory was developed as a second part of the job analysis step. This task inventory contained a variety of statements describing officer behavior in a number of different duty situation The inventory was submitted to 200 junior officers selected so that the representation in the sample of 200 would parallel the proportions of OCS graduates found in the various tour patterns. The basic requirement for inclusion in our sample was that the junior officer had served not less than two months during the last six in one of the duty positions defined as being part of the tour pattern involved.

The officers were asked to respond "Yes, this was a part of my job" or "No, it was not," and to add any new items that they felt should be on the list. From this procedure 258 tasks emerged. Examples of statements are: "Discussing tasks with NCOs before deciding how they should be done," "Requiring correction of work done incorrectly," "Punishing privately versus punishing publicly," and so on.

As a next step, a panel of captains, experienced in infantry, was obtained to sort these tasks into those which were most important, and those of lesser importance. The initial 258 Leadership tasks were sorted first into three groups, to retain 125 in a most important category. These were then sorted a second time into five groups to obtain 63 which were considered of such importance that no further deletions could be considered. Finally, these 63 tasks were rank ordered from "most important" to "least important," as a basis for the remaining steps of the systems engineering work.

This step actually constituted the selection of tasks for training, which completed the second part of our projected work in the systems engineering of OCS leadership instruction. The third step was to conduct

a training analysis to identify the knowledges and skills that should be taught in relation to these training tasks. This step is now in process, and is scheduled to be completed early in FY71.

OTHER HumRRO WORK UNITS

Work Unit OC LEADER

One major output from OC LEADER will be student performance objectives: (a) job analysis, (b) selection of training tasks, and (c) training analysis. The second major outcome will be the development of a Tactical Officer Leadership Development Guide. Since leadership is a critically important subject area, instruction by individuals responsible for teaching leadership should be carefully standardized and they should know in great detail what their objectives are. Consequently, we will write a "how to do it" manual for tactical officers in OCS that will help these young officers visualize the objectives of their developmental efforts more clearly. This should bring their practices in developing leadership closer together with the instruction given by USAIS in consequence of development of the student performance objectives just listed. We anticipate that this leadership development guide will be completed by the end of the Second Quarter, FY71.

Work Unit CAMBCOM

The objective of CAMBCOM is to identify knowledge and skill training requirements for battalion commanders and staff. This also is being accomplished in direct support of the Infantry School's system engineering of instruction. The results of the CAMBCOM work will constitute a basis for the development of training objectives by the Infantry School for the Infantry Officer Advanced Course.

As part of the guidelines from the Infantry School for the work, we were to deal with combat maneuver battalions only. We were to concern ourselves only with the battalion commander and staff positions S1, S2, S3, S4, and we were to assume that the incumbent held the rank authorized in the TOE. This was important from the viewpoint of anticipated experience and expertise factors. Figure 1 shows the methodology that was selected for this work, a standard job analysis methodology that has been used many times. The first step involves developing a preliminary job inventory from a variety of sources, which is then sent to experienced job incumbents in the field for comment. On the basis of their comments on the content of the inventory, together with the addition of new items as necessary, a final inventory is developed which is submitted to job incumbents to obtain the required job information.

There were two broad phases to this work. The first phase dealt with identification of knowledges and skills for the staff, and the second was concerned with the collection of information from battalion commanders. The work on principal staff has been completed and reported to the Infantry School. The work on the battalion commander is presently underway.

Figure 2 is a sample page from the S1 booklet, showing the types of informational items requested, and the manner in which a page could have

CAMBCOM Job Analysis Methodology

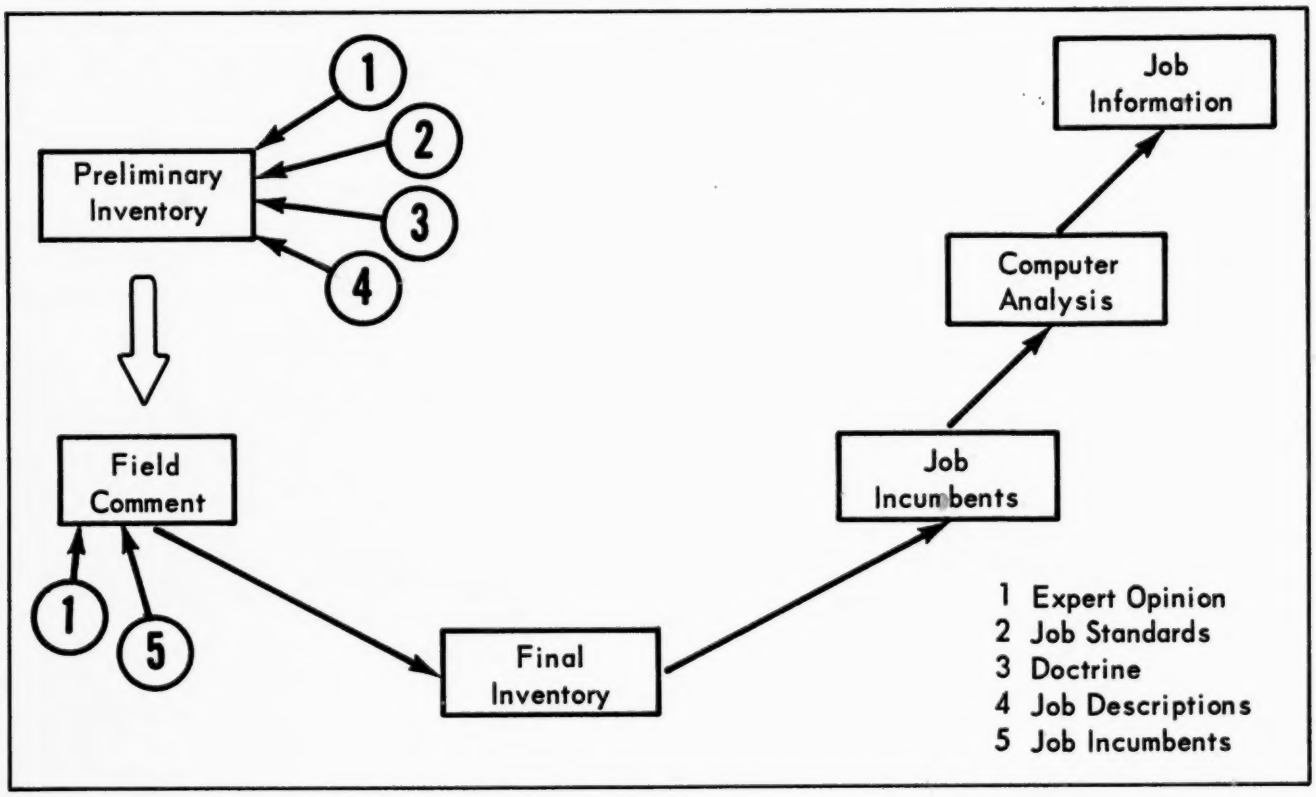


Figure 1

Sample Page From S1 Booklet

OBJECT	ACTION	How Often	How Much Time	How Difficult	How Important
		Daily / Weekly / Monthly / Quarterly / Infrequently	10-A Lot 8- 6- 4- 2- 0-Very Little	10-Very Hard 8- 6- 4- 2- 0- Very Easy	10-Greatest 8- 6- 4- 2- 0-Very Little
Replacements	a. Brief		2	0	6
	b. Determine priorities		6	4	8
	c. CO				
	d. Confer w/Bn S3 re:		3	0	8
	e. Confer w/Bn S4 re:		0	3	2
Where learned? School ___ OJT ✓	v.				
	w.				
Should be learned: School ✓ OJT ✓	x.				

Figure 2

been filled out by a respondent. We asked how often each subject was dealt with, how much time it required, how difficult the job was, and how important the job incumbent felt each task was. Further, we asked where the task was learned and where the incumbent felt it *should* be learned.

For battalion staff, we sent inventories to approximately 80% of all the combat arms maneuver battalions, worldwide. Figure 3 shows some examples of results from this data collection, as it pertains to the S3. Tasks were selected from the top, the middle, and the bottom thirds of all the tasks identified, as they were ordered in relative importance by S3s responding to the survey.

Importance of Tasks to S3

(A) Above Average
Scheme of Maneuver
Plan of Fire Support
Operational Readiness Test
Army Training Tests
•
•
•
Command Post Exercise (CPX)

(B) Average
SOI/SSI
Command Report
Training Calendar
Unit Journal
•
•
•
Training Facilities

(C) Below Average
Policy File
Periodic Reports
Rear Area Security
Training Schools
•
•
•
Training Aids

Note: The three dots in each section of Figure 3 indicate that there are substantially more tasks between the four shown and the next one, which is the least important task.

Figure 3

Figure 3 (A) shows the objects of top importance (top third) to S3s worldwide. These results are not particularly unexpected. (B) shows selected tasks from the group of middle importance (middle third), while (C) shows tasks selected from the group that were evaluated as least important.

In reporting to the Infantry School, the results were tabulated in each separate area, S1, S2, S3, and S4, to facilitate their utilization by the separate committees responsible for the eventual derivation of training objectives.

As indicated earlier, we are presently conducting the job analysis for the battalion commander. Preparation of the final job inventory has been completed and it has been sent to approximately 80% of the combat arms maneuver battalions worldwide, as was done with the staff inventories.

Figure 4 shows a portion of a page from the battalion commander's job inventory. We are asking for considerably less information in this booklet than in the case of the staff, mostly because the development of the battalion commander's inventory was quite difficult. Apparently, so much of his job is derived from experience that it is difficult even to ask the right questions to find out what he does.

Part of Page From Battalion Commander's Job Inventory

Object	Check if Involved	Part-of-the-Position
1. Formal relationship with officers		
2. Formal relationship with enlisted men		
3. Informal relationship with officers		
4. Informal relationship with enlisted men		
5. Officers' safety and welfare		
6. Enlisted men's safety and welfare		
7. Officers' personal matters		
8. Enlisted men's personal matters		
9. Accessibility to officers		
10. Accessibility to enlisted men		

Figure 4

We have some preliminary information from early returns, that may be of interest. These returns consist of biographical data on 50 commanders summarized in Figure 5. Section A (Rank), is not unexpected. With regard to Prior Command (B), it may be somewhat unexpected that so many battalion commanders had prior battalion command. Of course, virtually all had had command at lower levels. Source of commission (C) also probably is not unexpected—nor is Officer Years of Service (D), although it might be mentioned that the years of service average obtained in preliminary returns this year is somewhat lower than a similar figure obtained a year ago, indicating that the current battalion commanders may be receiving their commands at an earlier point in their careers. The amount of enlisted Service (E) was a major surprise to us. With regard to Military Education (F), the findings are probably what one would have predicted, as was the case with Civilian Education (G).

The initial CAMBCOM request dealt with the thought processes of battalion commanders and principal staff. This information has been particularly difficult to obtain. We have interpreted this part of the overall work to be an analysis of how the commander deals with information from his environment, that is, what he looks for, what he uses, how he

Biographical Data on 50 Commanders

(A) Rank

	Percent
LTC	98
MAJ	2

(B) Prior Command

	Percent
Platoon	98
Company	100
Battalion	20

(C) Source of Commission

	Percent
ROTC	44
USMA	26
OCS	26
Other	4

(D) Officer Years of Service

13-22 Years Range
17 Years Average

(E) Enlisted Service

56% Yes
2 Years Average

(F) Military Education

	Percent
Advanced Course	100
Command and Staff College	92
Armed Forces Staff College	8
Army War College	4

(G) Civilian Education

	Percent
BA	98
MA	30

Figure 5

uses it, what he uses it for, and what decisions result. A substantial part of the data being used in this analysis has come from the FORGE work to be described below.

The FORGE data are derived from a map exercise (CPX) written in a counterinsurgency environment, with controllers simulating brigade and platoon level, and players at battalion and company level. The "thought processes" data are coming from recorded interaction between the battalion commander and staff, and between those players and others in the simulate, that is, company commanders and controllers.

We have found that there are three sources of requirements that may be imposed upon an individual in one of these positions. These are by the individual himself, as a consequence of something he learned at a previous time, by higher levels of command, and by the situation itself, in the form of new information, a new development, input from company level, and so forth. There are three general kinds of action responses that can occur as a result. First, the individual may create a new response; second, he may make an automatic response (SOP); or third, he may store the information for use at a later time. We have found that good staff officers tend to make automatic responses most of the time. That is, for the staff there apparently is a procedure for almost everything.

A principal difference between the good staff officer and one who is not, is whether he knows the procedure. On the other hand, battalion commanders *create* responses far more often than they *respond* in an automatic fashion. Thus, there appears to be a division of labor between the battalion staff and the battalion commander, with the staff being principally responsible for applying procedures as required to support the battalion commander's decisions, while the battalion commander is responsible for decision making in situations in which an automatic response is not immediately available, or where the commander's responsibility is involved.

We will have completed the analysis of the present battalion commander data and will report to the Infantry School soon, depending on how fast returns continue to come in. The projected outcomes of CAMBCOM are (a) a ranked list of knowledges and skills for battalion staff (S1-S4) and battalion commander, and (b) thought process information concerning battalion commander and principal staff.

It is possible that the information obtained by the end of this current step may not provide the Infantry School adequate information on battalion commander decision-making processes. If this is so, either the outcomes from the present survey will be used to develop a more intensive job inventory which we will use for another survey, or we will develop the required information by working with the Infantry School during the development and experimental evaluation of the Airmobile Command and Control Simulator (ACCS) now in concept stage.

Work Unit FORGE

The third work unit to be described, FORGE, has as its objective the identification, study, and development of ways of controlling human factors affecting organizational performance.

In any effective organization, there are certain organizational functions which, logically, should be taking place. These include (a) acquisition of information, (b) processing of information, (c) decision making, (d) internal coordination, (e) implementation, and (f) evaluation of implementation results. These may be recognized as having been developed from Schein's adaptive coping cycle.[2] Whether these processes actually occur or not is perhaps a matter for debate. However, they appear to be logical processes through which any organization would need to go in order to remain responsive and adaptive to its environment. At least from the standpoint of theory, no organization can long survive unless it performs these steps well. The objective of FORGE is to study these processes in a controlled environment so that the actions of individual members of the organization can be classified in relation to these processes.

We hope to be able to compare successful and unsuccessful organizations in terms of which processes were performed better by the former. If these kinds of findings emerge, we can then proceed to a study of

[2]E.H. Schein. *Organizational Psychology*, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1965.

interpersonal interactions among individuals within the organization, to learn how their interactions contribute to effectiveness in performing organizational functions.

This is clearly of major importance for developing training for Advanced Course students. As you are well aware, an *experienced* senior commander can assume a new command, and within a very short period of time learn whether he has any real problems, such as, within his staff, between his staff and subordinate commanders. If such problems exist, a senior, experienced commander will then usually know what he should do to remedy the problems.

However, the key to his ability is experience, experience that young captains and majors have not yet had. The experienced commander has learned by observing other commanders, as a member of their staffs, and through his own trial and error. He has learned what kinds of symptoms indicate particular problems, and the kinds of actions that are effective in alleviating them. It is the objective of training to teach these kinds of skills at an earlier time to officers who are relatively less experienced. They will then be more effective in their first experiences on a senior staff or in a senior command, without having to go through a period of trial and error learning.

As mentioned earlier, the study vehicle for FORGE was a Battalion CPX in an internal defense and development setting. We used controlled inputs, which we called organizational probes, as shown in Figure 6. A probe was either one fact, or several related facts, that if correctly interpreted would have led to awareness of the need for a decision or action of some sort.

FORGE Battalion Command Post Exercise

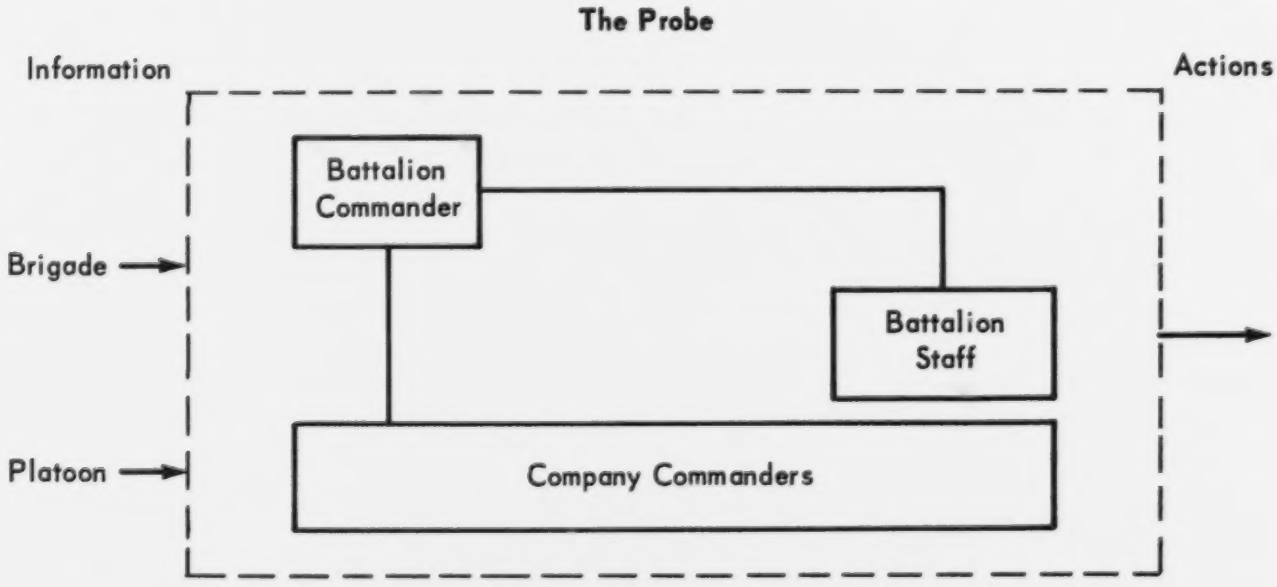


Figure 6

The key element of studying organizational process is to be able to submit individuals within a type organization to carefully controlled inputs, so that their outputs can be measured. The FORGE CPX was set up

in exactly this manner. There were controllers at brigade and platoon level which fed into battalion commander and staff, and company commanders as shown in Figure 6. Their actions, orders, and interactions were all recorded. All interactions among the players were also recorded by an elaborate system of tape recorders, wireless microphones, and radio receivers.

As a first step, a carefully developed set of messages was written to implement the concept of the CPX. We then "borrowed" captains from USAIS, who served as controllers in this CPX. We prepared a school for these controllers to teach them how to work with the messages, to respond to inputs from the players, and how to handle problem situations that might arise.

During the conduct of the CPX, each message that was sent or received was recorded in some manner. Figure 7 shows the channels that were recorded. As mentioned earlier, wireless microphones were used to record conversations, which permitted face-to-face conversations among players without losing any of the interaction content.

FORGE Simulate Communications System

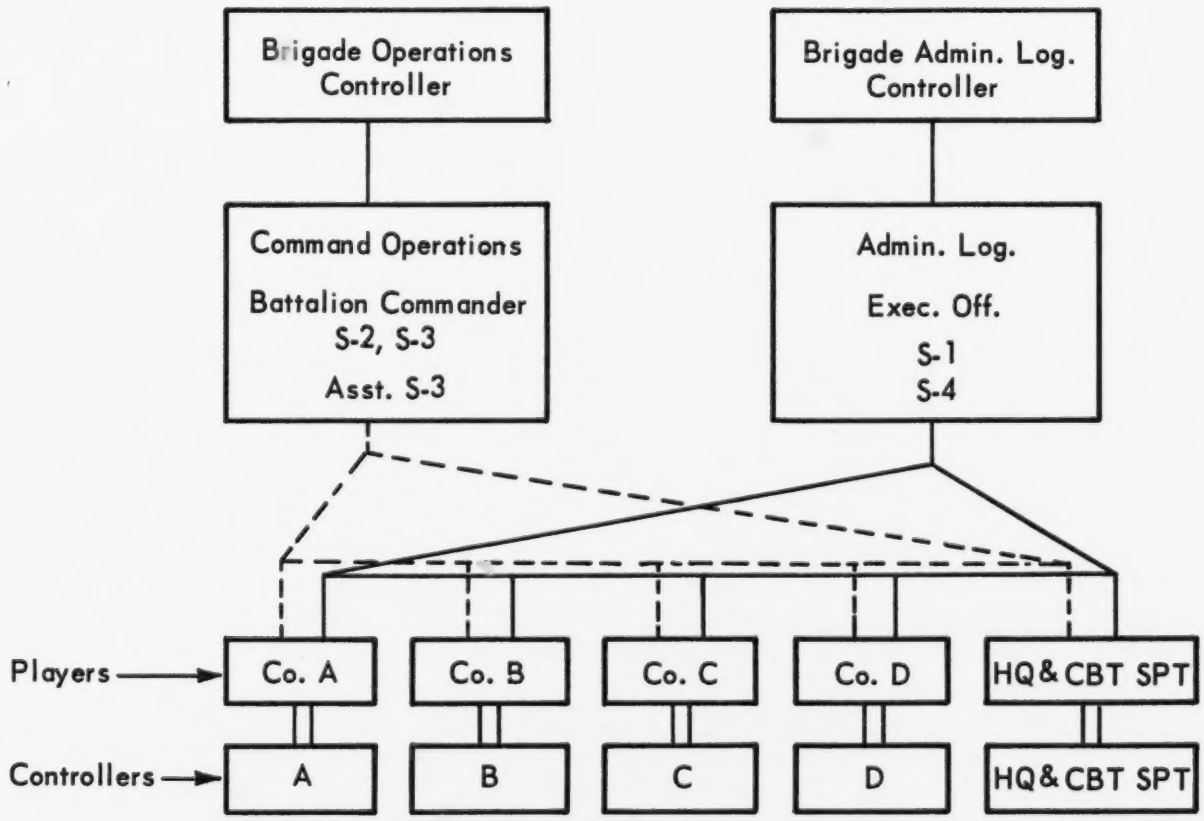


Figure 7

We have completed the scoring of the FORGE data, and are presently conducting an analysis. Approximately 1,500 contacts were recorded for each group studied, for a total of about 15,000 contacts.

The projected outcomes of the FORGE simulate are: (a) knowledge of human factors that influence performance of command and control system;

(b) improved methods for controlling these human factors, and (c) descriptions of how command and control systems function. Principal objectives are first to identify the human factors that influence the performance of command and control systems, then to develop improved methods for controlling these human factors, and finally to describe in these terms how command and control systems function. Again, the objective is to develop findings that will be useful for training Infantry Officer Advanced Course students who have not had the experience background that a battalion commander normally would have. Thus, we may be inventing new words, and new ways of using words to teach these knowledges and skills. We hope to be finished with the results of FORGE I in December 1970.

Work Unit INGROUP

The objective of Work Unit INGROUP is to evaluate the effectiveness of small group instructional techniques, and to identify ways to use these techniques for military instruction. This work unit is being conducted in conjunction with FORGE and by the FORGE staff.

We have completed a survey of the state-of-the-art on small group methods of instruction, and this has been reported.[3]

We plan to conduct an experimental evaluation of small group techniques in comparison with conventional teaching methods for small group instructional techniques. The remaining expected outcomes of INGROUP are: (a) analysis of current research and practices in field of education; (b) handbook of small-group instructional techniques, and (c) block of instruction for instructor training course—USAIS.

As a preliminary to the experimental evaluation, we will develop a handbook of small group instructional techniques to be used by instructors to implement the classroom procedures. This is as an example of the type of problem to be dealt with in the handbook—it frequently is not easy for an accomplished, professional instructor to relinquish control (or behave in a way that leads him to think he has relinquished control) of his classroom to a student working group. However, small group techniques will not work unless students actually feel they have responsibility for instructional outcomes. Thus, the instructor must *delegate responsibility* (as opposed to relinquishing control) and then *guide student progress* (rather than direct it). This is an example of the kind of fact and procedure that will be expanded in the handbook.

When the handbook is completed, there will be an experimental evaluation of small group instructional techniques at USAIS, using the instructor's handbook and selected instructional materials. This kind of instructional technique is extremely useful for conserving instructor resources since the capacity of the instructional staff can be expanded at the commandant's decision.

A final step will include the development of a block of instruction for the Instructor Training Course, which will further systematically train instructors in the application of these techniques.

---

[3]Joseph A. Olmstead, "Theory and State of the Art of Small-Group Methods of Instruction," HumRRO Technical Report 70-3, March 1970.

WORK UNIT SKYGUARD: AIR DEFENSE OFFICER COURSE

Paul G. Whitmore and Harry L. Ammerman

The objective of Work Unit SKYGUARD is to develop an improved Air Defense Officer Advanced Course (C-22) in conjunction with the U.S. Army Air Defense School. This work unit grew out of Exploratory Research 77, (AD Officer Career Course). It is a joint effort between HumRRO and the Air Defense School. The AD School is providing the content expertise and will increasingly take over the effort as techniques and procedures are developed and tested.

The recent separation of the artillery into two career branches—air defense and field artillery—created a need in 1968 for the development of a new nine-month program of instruction at the Air Defense School for the Air Defense Officer Advanced Course. With the establishment of the Air Defense branch, officers assigned to that branch will no longer be filling field artillery jobs in addition to air defense and branch immaterial jobs. A different structure of advanced career assignments is evolving. This change doubly complicates the problem of identifying the most essential and relevant career learning requirements. Because of the variety of previous duty assignments and future job assignments for the Air Defense officers, the school POI must possess the flexibility to accommodate a wide divergence of the officer's prior skills and knowledges, as well as their subsequent learning requirements.

Informal discussions between members of the research staff and representatives of the Air Defense School have led to the identification of three broad objectives for an improved advanced course. These are:

(1) To prepare the Air Defense officer to perform duties required in AD branch assignments.
(2) To prepare the Air Defense officer to perform duties required in branch immaterial assignments.
(3) To prepare the Air Defense officer for successful achievement at the Command and General Staff College.

The program of research is divided into three functional activities:

(1) The construction of job models and job descriptions for the Air Defense officer.
(2) The development of a functional context curriculum.
(3) The development of job simulations to be appropriately interspersed throughout the curriculum.

An officer can be given any one of a number of basically different kinds of assignments at different times. We are concerned not with one job, but with a broad array of jobs. Each must be identified and their constituent tasks described and their criticality for training determined This process began during the latter months of research in ER-77 with a

compilation of the assignments of Air Defense Lieutenant Commanders (LTCs). A computer print-out of these assignments was obtained from the Office of Personnel Operations (OPO). LTCs are obviously too advanced in their careers for their assignments to be entirely relied upon as the only job source for the design of an officer's advanced course. However, this listing has provided the researchers with information regarding the kinds and diversity of assignments that occur in the air defense career area.

Predominant DMOS[a] Assignments of Air Defense Lieutenant Colonels: FY 70

DMOS	Title	ARADCOM/ SCHOOL	8/RV/PAC/ MACV	EUR/NATO	DA/DOD	Other
2162	OPR/TNG STF O(G3,S3)	70	33	16	52	50
1177, 1180, & 1181	AD MSL U COMDR, STF O(N-H), GM SYS O	86	14	16	11	24
2625 & 4010	LOG O, SUP STF O(G4, S4)	15	9	5	10	17
2167	R&D Coord	1	1	1	5	28
2210 & 2260	PERS MGMT O, PERS STF O(G1,S1)	6	12	0	16	2
2517, 2520, & 2728	P MS, TNG O, MIL COL FAC MBR	3	0	2	0	26
9300 & 9301	STRAT/TAC INTEL O(G2,J2)	14	3	2	8	2
1174 & 1176	LT ADA, COMP AAA U COMDR	11	2	7	3	1

[a] Duty Military Occupational Specialty

Figure 1

The assignment information was easy to obtain since it had been stored in OPO's computer data banks. In addition, OPO has recently provided us the assignment history of graduates from the first three purely Air Defense classes plus the assignment history of 50 randomly selected Captains and 50 randomly selected Majors who completed the previous advanced course three to five years ago. Two officers from the Air Defense School have identified the job titles and the principal duties for the more recent assignments in these records, insofar as they are able to do so. In some instances, it will probably be necessary to contact the graduate in order to determine the exact nature of his assignments. (This is a developmental step that has been completed in Work Unit CAMBCOM for Infantry battalion level staff assignments.) We are still in the process of tabulating this information which will provide us with a basis for identifying the various jobs of Air Defense officers and for judging their criticality. However, we have not yet determined what criteria to use in judging criticality.

A model will be developed for each of the more critical jobs to serve as a guide in preparing detailed job descriptions. Each job model will specify the gross duties that constitute the job, the environments in which they occur, and the rationales underlying the selection of the particular duties and environments. The duties will be defined at a sufficient level of generality so no more than about a half dozen are required to encompass the job, but they will describe the performance situation at length.

Once the duties of a job have been identified, they are fractionated into successive levels of more detailed component activities until a trial inventory of discrete and circumscribed tasks and situations has been generated. The contrivance of an adequate job model and the derivation of a trial task inventory from the model are the most critical steps in establishing the relevance of a curriculum. Both rational analysis and information-gathering procedures play a role in this process. For example, we have recently begun a pilot effort as a means of developing and testing our procedures. We selected that portion of the Air Defense Officers Advanced Course which deals with the preparation of the intelligence estimate. First, we formulated a broad duty statement, which is much more inclusive than simply preparing an intelligence estimate, as follows:

> Determines the most probable course of enemy action at any given point during a dynamic combat situation at brigade and at division levels.

The segment of the present course that we are seeking to improve in this pilot development is oriented towards the proper format in which to arrange a written intelligence estimate. Our statement is oriented towards the most critical content of and the process for conducting the intelligence estimate. We fractionated this broad duty statement into three component activities:

(1) Formulates hypotheses
(2) Tests hypotheses
(3) Reformulates hypotheses

There was some hesitancy to proceed with this behavioral model on the ground that such a model might be viewed as too exotic for military consumption. However, we found that the first two components of this model appear in FM 30-5[1] as a means of describing the integration of intelligence information. It is a general model that should be applicable to many officer duties.

Further fractionation of the "formulates hypotheses" branch of the model is patterned after the mental processes implicit in the format of the intelligence estimate. The first three subcomponents deal with the formulation of tentative or partial hypotheses based on three different kinds of information. Possible enemy courses of action or possible restrictions on enemy courses of action are hypothesized—first, on the basis of physical aspects of the area of operations; second, on the basis

---

[1]Department of the Army. *Combat Intelligence. Change I,* Field Manual 30-5, Washington, July 1963.

of characteristics of the inhabitants of the area of operations; and, third, on the basis of characteristics of the enemy situation. In the final component, these various hypotheses and restrictions are weeded, combined, and integrated into a consistent set of expectations.

Further fractionation of the "tests hypotheses" branch incorporates elements of the intelligence collection process. Further fractionation of the "reformulates hypotheses" is new in that it does not directly correspond to procedures in existing military publications.

The segment of the present course which we are seeking to improve in this pilot development has nine performance objectives:

(1) Define strategic intelligence, combat intelligence, and counter-intelligence
(2) Explain how the mission, enemy, weather, and terrain affect the intelligence effort.
(3) Describe the four functional areas of a type infantry division G2 section.
(4) Explain how essential elements of information (EEI) and other intelligence factors are used to plan the collection effort.
(5) Explain the difference between an intelligence source and an intelligence agency.
(6) Explain the three steps in the processing phase of the intelligence cycle.
(7) Define and give three examples of one-time reports as used in disseminating intelligence data.
(8) Define and give three examples of periodic reports as used in disseminating intelligence data.
(9) State the responsibility of the intelligence officer for intelligence training and list four purposes of aggressor forces used in training.

Although these objectives are termed performance objectives, they do not specify job-relevant performances, standards, or conditions. The job simply does not require an officer to "define and give three examples of periodic reports . . . ."

The fractionation of broad job duties into successive levels of component tasks leads to the development of a very different kind of objective. For instance, the first fractionation in the "formulates hypotheses" branch in our pilot effort looks like this:

01 Formulates hypotheses regarding enemy courses of action.
01 01 Identifies facilitations and restrictions on courses of action imposed by the area of operations.
01 02 Identifies facilitations and restrictions on courses of action imposed by enemy situation.
01 03 Determines possible enemy courses of action and estimates probability of occurrence of each one.

A list of the subordinate fractionations is shown in the Appendix. This approach places each component of the job in its appropriate job context. This type of fractionation will continue until a level of component tasks is reached which can be accomplished by virtually all incoming

students. Each of these statements forms the action segment of a single performance objective. So far, we have 77 such statements in our pilot fractionation. And we have not yet determined whether incoming students can perform our lowest level tasks.

The knowledges and skills that constitute the training content can be more precisely identified as a result of having developed a structured specification of the tasks which make up the duty requirement. We have not been able to find many of these knowledges and skills in the related Army publications. For instance, publications describing the intelligence estimate strongly suggest that the officer's mental process proceeds from raw intelligence information to indications, to capabilities, and to courses of action, and we have developed our description of the intelligence estimate activity along these lines.

The various detailed logics relating intelligence information to indications, indications to capabilities, and capabilities to courses of action have not been specified in the printed textual materials, though experienced officers have been able to verbalize many of these interrelationships. The examples available in these publications are limited in number. Since this logic does not exist in the available textual materials, it will be necessary to generate it from knowledgeable and experienced officers. We have not yet selected an approach for obtaining this information. There are several possibilities, one of the more attractive being an analysis of descriptions of combat actions as was done in Work Unit LEAD with respect to the Infantry Rifle Platoon Leader's job.[2] However, since we do not possess an inventory of appropriate descriptions, it may be possible to use carefully developed artificial descriptions. These descriptions could be the basis for preparing adaptive simulations in which an officer's performance could be observed and analyzed.

We have also been exploring a recently introduced technique for identifying the structure by which job incumbents organize their important job concepts. This is done by means of word associations obtained from groups of individuals in a job. In this procedure, the individuals are presented a list of words consisting of technical job terms. They are presented each word separately and given a set amount of time to list their verbal associations to each word. A series of statistical analyses of these responses results in the construction of a hierarchial structure of technical concepts that represents the manner in which the technical terms and concepts are grouped and interrelated by that sample of workers. A hypothetical instance is shown in Figure 2.

We have recently completed a pilot application of this technique using electronics maintenance technicians. Our initial interest has been in methodology rather than content. However, we are presently developing a word list consisting of intelligence terms in order to merge these two pilot efforts. These concepts structures may give us better information regarding the actual mental process used by various types of officers (for example, experienced versus inexperienced, Air Defense versus Infantry, and so forth) than will our previous rationalized approach.

---

[2]Frank L. Brown and T.O. Jacobs. *Developing the Critical Combat Performance Required of the Infantry Rifle Platoon Leader*, HumRRO Technical Report 70-5, April 1970.

Hierarchial Structure of Technical Concepts

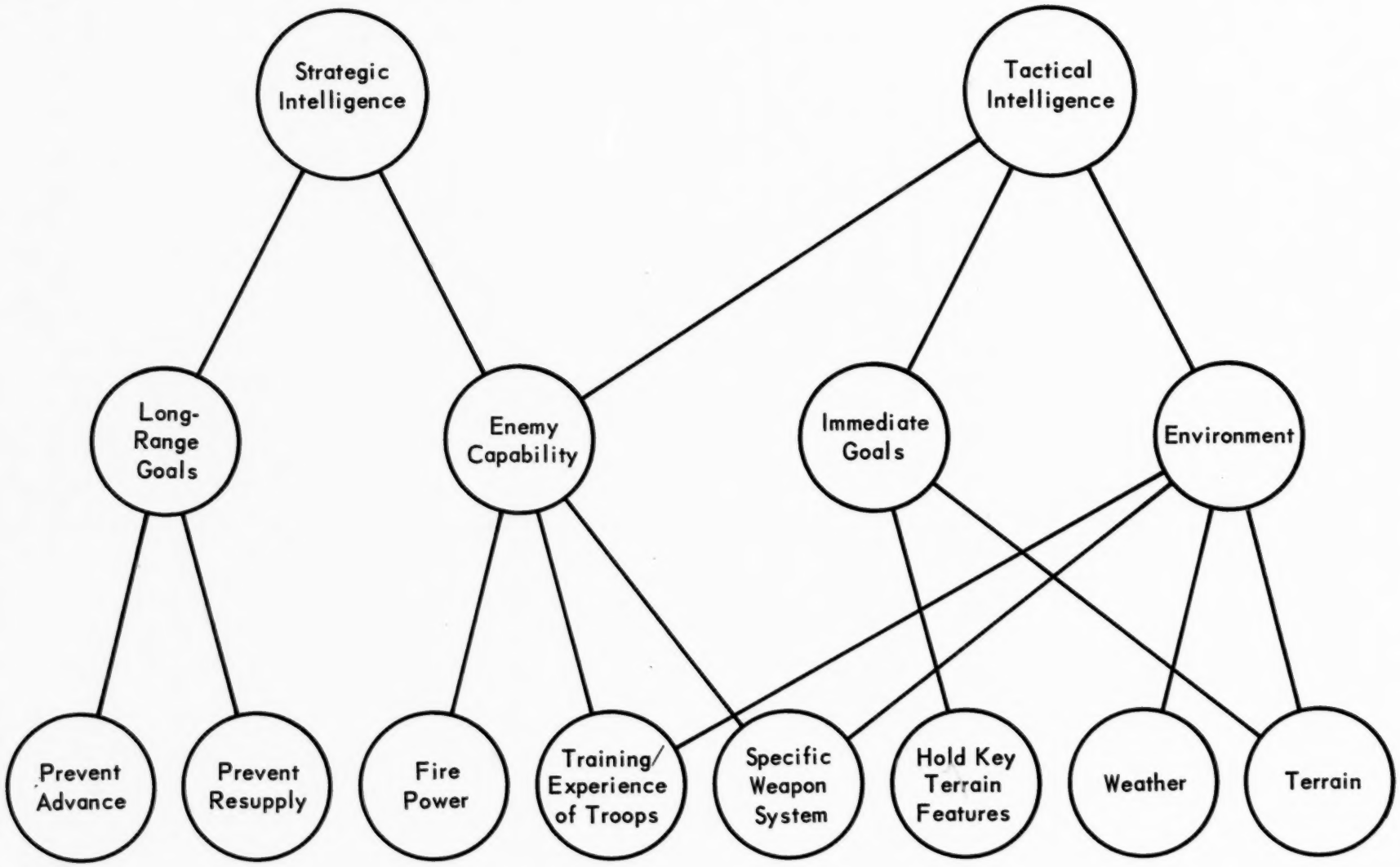


Figure 2

Let me describe the kind of course structure we hope to develop. The goal is to facilitate transfer from the instructional situation to actual job performance. To do this, simulations of the job events will be incorporated directly into the curriculum in a functional context sequence. The functional context principle dictates that content topics be introduced in such a manner that the relevance of each to the job context can be demonstrated for the learner at the time it is taught. The job tasks constitute the contexts in which to teach the associated knowledges and skills. In general, the first presented task should require the student to learn the least in terms of knowledges and skills. Subsequent tasks are arranged so as to build on the knowledges and skills acquired during instruction on preceding tasks. We will group tasks having many knowledges and skills in common into instructional blocks (Figgure 3). Each block will be divided into two sub-blocks. In the first sub-block, the student will learn or acquire the knowledges and skills associated with a specific group of tasks. In the second sub-block, he will enact the actual job tasks under simulated conditions.

Instructional Blocks Showing Tasks With Common Knowledges and Skills

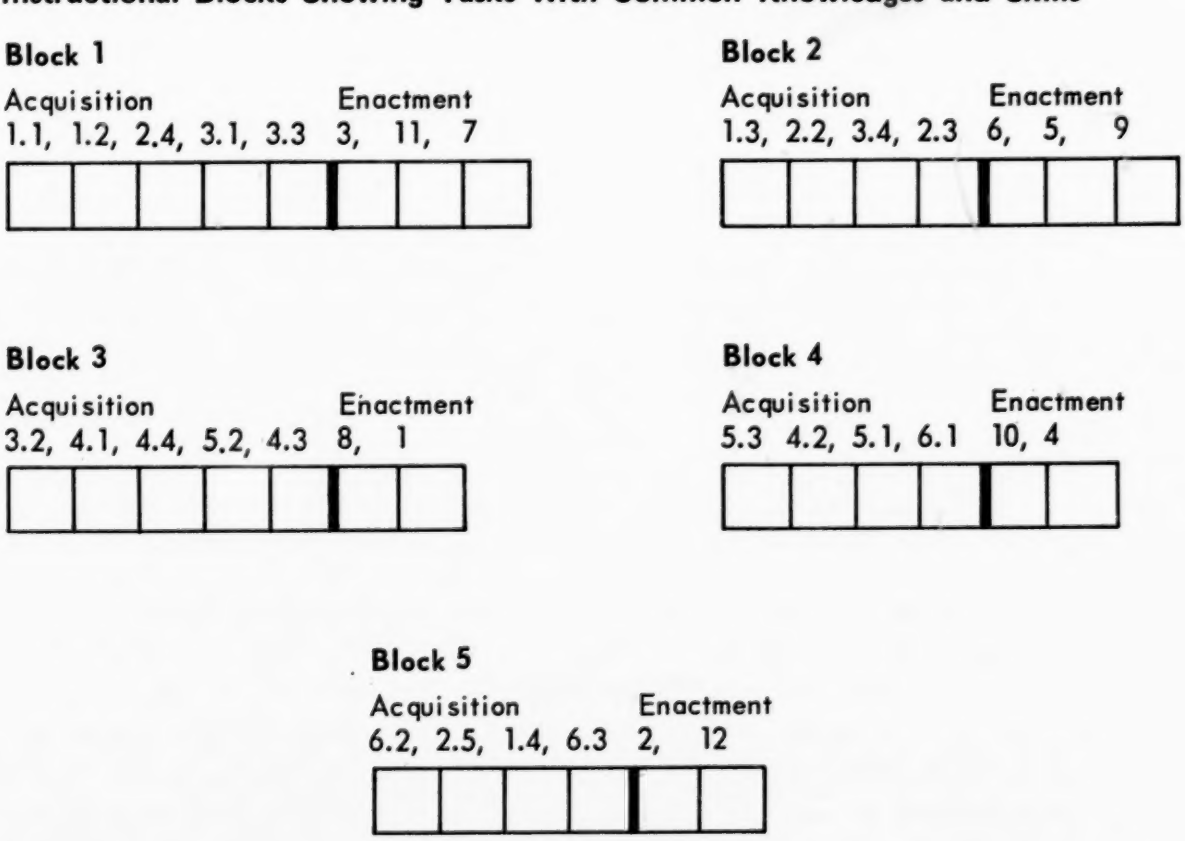


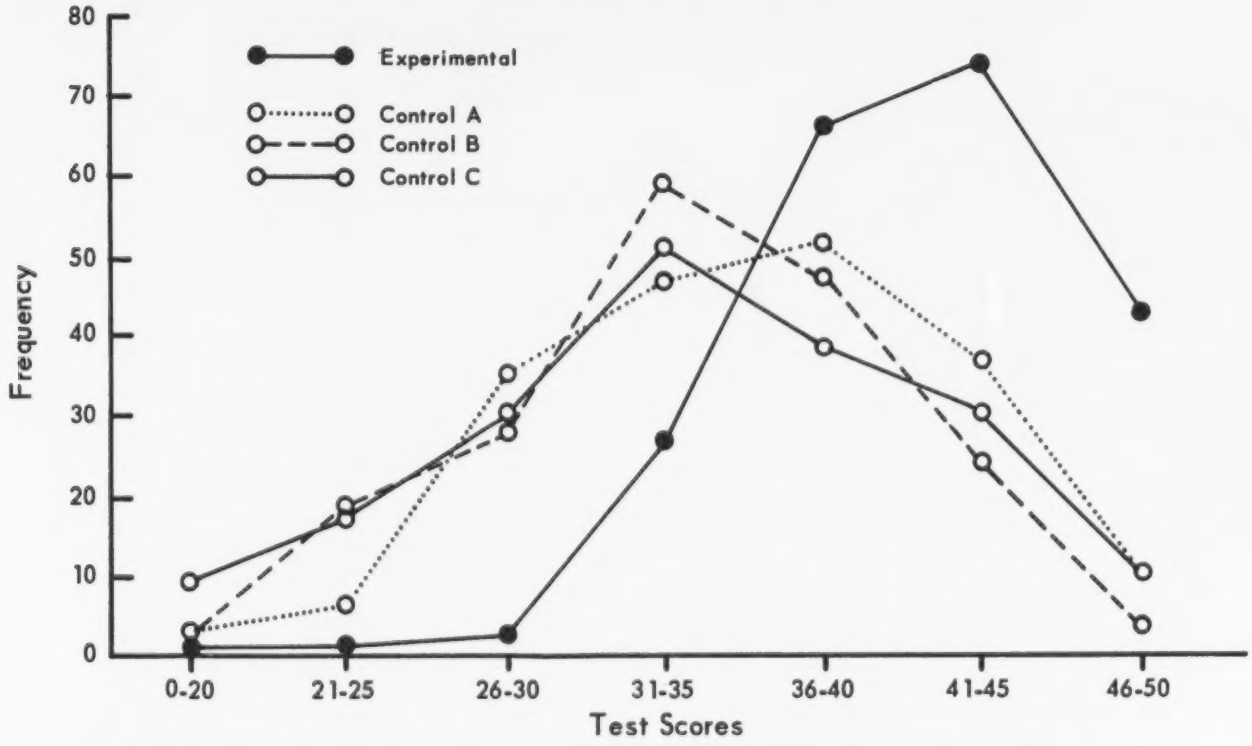
Figure 3

The knowledges and skills in the acquisition sub-block will be arranged into a series of discrete modules. The students will be required to achieve the knowledges and skills in each module to a level of mastery before being allowed to progress to the next module. The mastery module approach is based on the fact that interference in learning among habit

systems is reduced when new habits are introduced only after previous habits have been well established.

In a recent study at C.W. Post College, Greenvale, N.Y., by McMichael and Corey,[3] three introductory psychology classes were taught in the traditional way. A fourth class was taught by means of mastery modules. Each student was required to perform at mastery on an individually administered criterion test for a given module before progressing to the next module. If he failed the test on the first try, the test proctor would correct his misconceptions and send him back for further study. He would then try the test again. This procedure continued until he passed the test. All students in all classes were given the same final examination with the results shown in Figure 4. The students in the experimental class clearly did better. All classes completed the program in the same period of time. In this kind of system, students progress at individual rates in the acquisition sub-blocks using self-instructional materials.

Test Results of Experimental Class Versus Three Traditional Groups



Distribution of test scores for the three control classes and the experimental class. The mean score for the experimental class was 40; for Control A, 35; Control B, 34; and Control C, 34.

Figure 4

The enactment modules will require the students to perform varying elements of the jobs under simulated operational conditions. The job elements may range from discrete routine procedures to dynamic decision making. The enactment of dynamic decision-making processes will require

[3]James S. McMichael and Jeffrey R. Corey. "Contingency Management in an Introductory Psychology Course Produces Better Learning," in *Journal of Applied Behavior Analysis*, vol. 2, no. 2, Summer 1969, pp. 79-83.

interaction among students in a gaming situation. No differential grades would be given in the acquisition sub-blocks since all students are required to achieve a prescribed level of mastery. Failure is not a problem since differences in learning ability are reflected in time-to-learn rather than amount learned.

An educational program of this extent and at this level should contain more than "hard" job content. It should also contain electives which capture the students' interest and develop their individual talents. We envision an elective program that allows the student to elect not only in subject matter, but also in depth. We hope that we will be able to apply this concept both to the elective subjects and to the "hard" subjects. This level of the curriculum would be structured as shown in Figure 5. When the student completes Block 1, he faces two choices: He may proceed to the next content block, or he may proceed to one of three elective units which present more information about aspects of the content presented in Block 1.

Curriculum Structured to Allow Choices

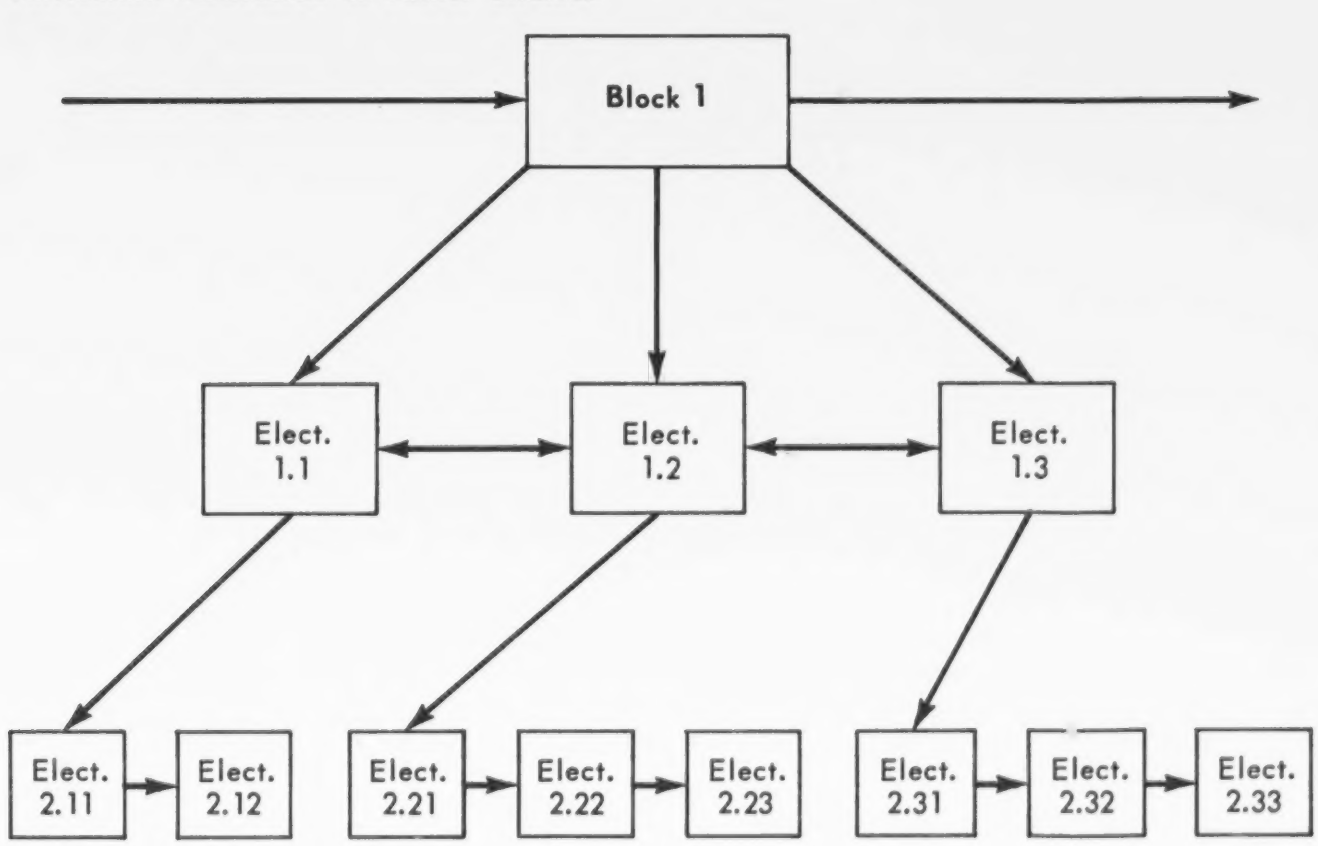


Figure 5

He may proceed from the first elective level to even greater detail if he chooses. The object is to devise a scheme that allows the student to pursue his interests as they develop, insofar as possible. With this elective system, each AD officer would be able to select subject areas and depth within these areas to fit in with his own background and projected needs.

We had originally approached this effort from the point of view of restructuring the curriculum into an individualized format such as that described. However, it has become increasingly apparent that much more effort will have to be devoted to the derivation of job relevant knowledges and skills than we had originally anticipated. In fact, this may well become the major part of the effort.

Appendix

A TENTATIVE HIERARCHICAL LISTING OF COMPONENT TASKS REQUIRED FOR ACCOMPLISHING THE INTELLIGENCE ESTIMATE AT BRIGADE AND DIVISION LEVEL

01 Determines the most probable courses of enemy action at any given point during a dynamic combat situation at brigade and at division level.

01 01 Formulates reasonable hypotheses regarding enemy courses of action.

01 01 01 Identifies the facilitations and restrictions on the selection of enemy and friendly courses of action which are imposed by the characteristics of the area of operations.

01 01 01 01 Identifies facilitations and restrictions imposed by the physical environment.

01 01 01 01 01 Prepares a general description of the physical characteristics of the area of operations.

01 01 01 01 01 01 Collects information basic to the description.

01 01 01 01 01 01 01 Collects information on climatic and weather conditions.

01 01 01 01 01 01 02 Collects information on terrain.

01 01 01 01 01 01 02 01 Collects information on relief and drainage systems.

01 01 01 01 01 01 02 02 Collects information on vegetation.

01 01 01 01 01 01 02 03 Collects information on surface materials.

01 01 01 01 01 01 02 04 Collects information on man-made features.

01 01 01 01 01 02 Arranges information into an appropriate report format.

01 01 01 01 02 Prepares an analysis of the military aspects of the physical environment with regard to both enemy and friendly forces:

01 01 01 01 02 01 Analyzes tactical aspects:

01 01 01 01 02 01 01 Analyzes for observation and fire aspects.

01 01 01 01 02 01 02 Analyzes for concealment and cover aspects.

01 01 01 01 02 01 03 Analyzes for obstacles.

01 01 01 01 02 01 04 Analyzes for key terrain features.

01 01 01 01 02 01 05 Analyzes for avenues of approach.

01 01 01 01 02 02 Analyzes combat service support aspects.

01 01 01 01 02 02 01 Analyzes for personnel aspects.

01 01 01 01 02 02 02 Analyzes for logistics aspects.

01 01 01 01 02 02 03 Analyzes for civil affairs aspects.

01 01 01 01 02 03 Determines the effects of the physical characteristics of the area on both enemy and friendly courses of action.

01 01 01 01 02 04 Arranges the results of the preceding analyses and determinations into an appropriate report format.

01 01 01 02 Identifies facilitations and restrictions imposed by the characteristics of the inhabitants.

01 01 01 02 01 Prepares a general description of the sociology, politics, economics, psychology, and so forth of the inhabitants of the area.

01 01 01 02 02 Determines the effects of the characteristics of the inhabitants on both enemy and friendly courses of action.

01 01 01 02 03 Arranges the preceding information and determinations into an appropriate report format.

01 01 02 Identifies the facilitations and restrictions on the selection of enemy courses of action which are imposed by the enemy situation.

01 01 02 01 Prepares a general description of the enemy situation.

01 01 02 01 01 Collects information basic to the description.

01 01 02 01 01 01 Collects information on the enemy disposition.

01 01 02 01 01 02 Collects information on the enemy composition.

01 01 02 01 01 03 Collects information on the enemy strength.

01 01 02 01 01 03 01 Collects information on enemy committed forces.

01 01 02 01 01 03 02 Collects information on enemy reinforcements.

01 01 02 01 01 03 03 Collects information on enemy air.

01 01 02 01 01 03 04 Collects information on enemy nuclear weapons and chemical and biological agents.

01 01 02 01 01 04 Collects information on recent and present significant activities by the enemy.

01 01 02 01 01 05 Collects information on peculiarities and weaknesses of the enemy.

01 01 02 01 01 05 01 Collects information on enemy personnel.

01 01 02 01 01 05 02 Collects information on enemy intelligence.

01 01 02 01 01 05 03 Collects information on enemy operations.

01 01 02 01 01 05 04 Collects information on enemy combat service support.

01 01 02 01 01 05 05 Collects information on enemy civil-military operations.

01 01 02 01 01 05 06 Collects information on enemy personalities.

01 01 02 01 02 Arranges information into an appropriate report format.

01 01 02 02 Determines the effects of characteristics of the enemy situation on enemy capabilities and courses of action.

01 01 03 Determines possible enemy courses of action and estimates the probability of occurrence of each course of action by collating and integrating all previous information, analyses, and determinations.

01 01 03 01 Lists all possible courses of action identified during the preceding activities.

01 01 03 02 Collates and evaluates all preceding information, analyses, and determinations bearing on the likelihood of each possible course of action.

01 01 03 03 Arranges collations and evaluations into an appropriate report format.

01 02 Tests each hypothesis regarding enemy courses of action.

01 02 01 Identifies information required for testing each hypothesis.

01 02 01 01 Identifies the critical indications which contribute to the probability of the occurrence of each possible course of action.

01 02 01 02 Evaluates existing information confirming or denying each critical indication.

01 02 01 03 Identifies those critical indications which can be neither confirmed nor denied on the basis of existing information.

01 02 01 04 Identifies those kinds of information required to either confirm or deny the above critical indications.

01 02 02 Arranges for collection of required information.

01 02 02 01 Selects appropriate collection agency.

01 02 02 02 Prepares and processes recommendations, orders, and requests for obtaining the required information from the selected agencies.

01 02 03 Evaluates each possible course of action on the basis of the incoming information.

01 02 03 01 Evaluates incoming information.

01 02 03 02 Interprets evaluated information.

01 02 03 02 01 Analyzes information by relating each element to appropriate critical indications.

01 02 03 02 02 Evaluates adequacy of existing and incoming information to confirm or deny each critical indication.

01 02 03 02 03 Assesses indications associated with each possible course of action and re-evaluates the likelihood of occurrence of each possible course of action.

01 03 Reformulates reasonable hypotheses regarding enemy courses of action.

01 03 01 Removes low likelihood courses of action from list of possible courses of action.

01 03 02 Adds new courses of action to list of possible courses of action.

01 03 02 01 Updates information, analyses, and determinations.

01 03 02 02 Reviews consistency of all indications with listed possible courses of action.

01 03 02 03 Identifies those indications which are not consistent with any listed possible courses of action.

01 03 02 04 Identifies courses of action which are consistent with the previously excluded indications and adds them to the list of possible courses of action.

01 03 02 05 Returns to task 01 02: Tests each hypothesis regarding enemy courses of action.

DEVELOPMENT OF A TECHNIQUE FOR CREATING "CULTURAL SELF-AWARENESS"

Alfred J. Kraemer

The training of military advisors has usually been dealt with in terms of three components: Training in Military Assistance Advisory Group (MAAG) operations and procedures, language training, and area training. Sometimes refresher training in one's military specialty is added to these. In this paper, we will be concerned only about some aspects of area training.

Area training, as generally conceived, is the imparting of information about the host country's customs and habits, its geography, its history and politics, its military resources, and so on. It has been assumed that this kind of area information, usually acquired through lectures, readings, and films, would somehow enable the advisor to adjust more readily to the foreign culture, and to work more effectively with his counterpart.

This process, while necessary, falls far short of preparing the advisor for communicating effectively with people who have a vastly different cultural background. What makes such communication difficult—apart from the language problem—is the fact that, in addition to the visible cultural characteristics such as habits and customs, each culture (including ours, of course) inculcates its members with certain ways of perceiving, feeling, and reasoning that they assume to be "natural" and, therefore, more or less universal. To be sure, most of us can readily be made aware of the fact that Americans dress differently, eat differently, live in different kinds of houses, worship differently, and have different kinds of political beliefs, than people in non-Western cultures. But most of us assume that underneath such obvious differences people are really very much alike. Let me illustrate by several examples from the field.

My first example is from Thailand where an advisor told us that he could not understand why the Thai officers with whom he was dealing seemed to be unable to separate work and play. Some serious matters seemed to be taken very lightly by them, and work and play were often itermixed throughout the day.

My second example is from Vietnam. An Engineer advisor assigned to a South Vietnamese Army Engineer unit engaged in a road-building project related the following: In the course of the project, the Engineer unit ran out of the crushed rock that was being used to lay the foundation of the road. The advisor, knowing that delays would result if he were to ask for additional rock through the usual channels, suggested to his counterpart that rock be obtained from a nearby mountainside where a quarry could be opened. He offered to provide the necessary equipment

for doing the job. The counterpart seemed to understand and seemed to react in a way to suggest that action would be taken. After a week had passed and nothing happened, the advisor broached the subject again; and again, he got the same reaction. And so, several weeks passed during which there was a lot of wasted motion and a lot of frustration, but no action on the matter. To the advisor, the counterpart was a man afraid to make decisions, lacking in motivation and initiative, an incompetent officer.

My last example, also from Vietnam, was related by a newspaper reporter. During the 1960 American presidential election, a U.S. official in Saigon showed the reporter a crowd eagerly watching the tabulation of the returns in a display window of the U.S. Information Service, saying that this demonstrated an interest in democratic procedures.

Now what do these three examples have in common? On the surface, nothing! One is about some peculiarity of Thai officers; the second, indecisiveness in a Vietnamese counterpart; the last one, a reported growing interest in democratic procedures by the South Vietnamese. But actually, these examples have something very important in common. Each one shows very clearly some peculiar cultural characteristic of the *Americans* involved in them. Let's look at these examples again.

First, the one from Thailand: There is obviously nothing God-given about making a distinction between work and play. This is a distinction we Americans have learned well. There are certain hours set aside for work, and other hours set aside for play, and the two shall not be mixed. But there is really nothing more peculiar about *not* making this distinction than there is about making it.

In the example from a Vietnamese road-building project, the advisor later discovered that the reason why his advice was not acted upon was that the counterpart and his superiors thought of the suggested mountainside as a "thing of beauty" not to be destroyed. The American simply perceived the same mountainside as a likely source for rock. Generally speaking, for us the beauty of nature has a much lower priority than the practical uses to which natural resources can be put, especially when there is a war going on. But this is a *cultural* characteristic and is not universally shared. To many people, it seems odd that we think of nature primarily as something to be conquered and to be exploited.

In my last example, the reporter later discovered that the crowd in front of the USIS window was so interested in the tabulation of our election results because they were betting on what numbers would come up next.

In short, each one of these examples shows the American behaving, and interpreting the behavior of host-country personnel, in terms of assumptions based on his own culture—assumptions of which he is either totally unaware, or which he mistakenly believes to be shared by everyone because he is not aware of their cultural origin. This lack of awareness of his own cultural peculiarities results in his making *false* assumptions about the psychological processes of the host-country nationals with whom he deals.

Our research has been concerned with the problem of how advisors could be made more conscious, during area training, of the cultural nature of their own ideas, feelings, and behavior—to develop in advisors what we call "cultural self-awareness." We believe that this kind of training would make it easier for advisors to see themselves as their counterparts see them, and to appreciate the need for learning the subtle cultural influences on the ideas, feelings, and behavior of host-country nationals.

How can we effectively teach this "cultural self-awareness"? This, essentially, is the research question in Work Unit COPE.

A "Simulated Inter-Cultural Encounter" was developed. This is a two-person interaction in which an Army officer (usually a captain) is asked to play the role of an advisor in a series of imaginary on-the-job situations in which he meets with a host-country national. The latter is played by a foreign national who has been trained to play his role in a way that would highlight the cultural characteristics displayed by the American officer. The following is a description of an officer's instructions for *one* of these encounters.

> In summary, he is told that he will participate in a two-person, role-playing exercise with a foreigner. The concept of role-playing is explained to him, and it is emphasized that he is to play his role as he thinks he would in real life. In short, we do not want any acting on his part. It is important that he be himself. He is then told that he has been assigned as an advisor to an Engineer battalion stationed in a rural area of one of the so-called "less-developed" countries. A general description of the area is provided without specific geographic reference. He is told that the foreigner grew up in such an area and will play the part of a village chief. The officer's mission is to get the battalion to develop a "Civic Action" program for the area where it is stationed. Emphasis is to be on self-help projects. He has sold the idea to the Battalion Commander and the latter has decided that both of them should visit the village chiefs in the area to get their support for the program. The instructions then go on to explain that today, they will have the first such visit with the chief of the nearest village. At the last minute, the major is prevented from going to this meeting by a called to higher headquarters, and he asks the advisor to go alone. The latter has now arrived at the village and is about to meet with the chief.

No specific instructions are given as to what is expected of the officer. The encounters are recorded on videotape. If you were to see one of these recordings, you would get the impression that this is a presentation intended to teach certain "do's" and "don't's" applicable to that particular kind of situation, and to get the viewer to learn the correct approach to be used. The recordings may actually do this, but that is only a fringe benefit. The real purpose of the encounters is to engage the officer in a social situation with a foreigner in such a way as to get him to portray, *unwittingly, and quite spontaneously*, certain American cultural characteristics. The material recorded in

this manner serves as the basis for the instructional process to be developed.

The most difficult problem that this process must overcome is the inability of most people to recognize cultural influences in themselves or in other members of their own culture. As we have discovered during showings of our tapes to classroom audiences in the Military Assistance Officer Program (MAOP) course, students perceive only the most obvious cultural characteristics of the Americans, even after they have been told what to look for. To overcome this difficulty, the video material we are developing will consist mainly of a series of excerpts from the recordings, each series focusing on a single cultural characteristic and showing a variety of manifestations of that characteristic. Also, in order to avoid giving the impression that these are characteristics peculiar to Army officers, each series will include excerpts from recordings of encounters in which the Americans are members of other government agencies represented on the country team.

We are fortunate in having the cooperation of the Engineer School in our efforts. To date, over 30 officers from the school have participated in the videotaped encounters, and approximately 40% of the needed material has been recorded.

I will not go into greater detail as to the various cultural peculiarities of Americans to be included in the instructional presentation. However, I would like to make you aware of one more peculiarity, one that all of you have had ample opportunity to observe on a grand scale.

All of us have heard, over and over, since our entry into the Vietnam conflict, that one of the United States' purposes there is to help the South Vietnamese to determine their own future, their own destiny. Now, to most Americans, hawks and doves alike, the idea that people can determine their own future is a quite obvious proposition that is unwittingly assumed to be shared by most of mankind. The cultural bias of that proposition is not recognized by most of us.

I suggest that the next time any of you are in Vietnam, you take the following question: "Would you like to see your people be able to determine their own destiny?" Try to get it translated accurately into Vietnamese. And then put it to a cross-section of South Vietnamese peasants and ask them what this question means to them. You should get some interesting reactions.

Unclassified

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY *(Corporate author)* Human Resources Research Organization (HumRRO) 300 North Washington Street Alexandria, Virginia 22314	2a. REPORT SECURITY CLASSIFICATION Unclassified 2b. GROUP

3. REPORT TITLE

HumRRO RESEARCH ON OFFICER TRAINING

4. DESCRIPTIVE NOTES *(Type of report and inclusive dates)*

Professional Paper

5. AUTHOR(S) *(First name, middle initial, last name)*

HumRRO Staff Members

6. REPORT DATE	7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
September 1970	44	25

8a. CONTRACT OR GRANT NO.	9a. ORIGINATOR'S REPORT NUMBER(S)
DAHC 19-70-C-0012 b. PROJECT NO. 2Q062107A712 c. d.	Professional Paper 24-70 9b. OTHER REPORT NO.(S) *(Any other numbers that may be assigned this report)*

10. DISTRIBUTION STATEMENT

This document has been approved for public release and sale; its distribution is unlimited.

11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY
Papers for CONARC Briefing on Officer Training Research Programs	Office, Chief of Research and Development Department of the Army Washington, D.C. 20310

13. ABSTRACT

This paper records the four presentations on officer training and education research programs made by members of the HumRRO staff at a briefing sponsored by the Office of the Deputy Chief of Staff for Individual Training at Headquarters, U.S. Continental Army Command in July 1970. The presentations provide information about selected HumRRO research projects, summarizing the work, describing progress to date, and giving a forecast of future demands to be placed on military leaders and advisors. The briefing was the fourth in a series on HumRRO training research and development programs.

DD FORM 1 NOV 65 1473

Unclassified

Security Classification

Unclassified

Security Classification

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Air Defense Officer Course						
Behavioral Analysis						
Cultural Characteristics						
Cultural Self-Awareness						
Leadership Training						
Officer Training						
Training Concepts and Theories						
Training Research						
Training Technology						

ERIC Clearinghouse
DEC 2 1 1970
on Adult Education

Unclassified

Security Classification